AGILENT TECHNOLOGIES, INC.
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Intellectual Property Administration
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PATENT APPLICATION

ATTORNEY DOCKET NO. 10021278-1

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Jonathan Simon et al.

Serial No.: 10/635,810 **Examiner:** Derek L. Dupuis

Filing Date: 8/5/2003 **Group Art Unit:** 2883

Title: Los Cost Optical Interconnect for Fiber Optic System

COMMISSIONER FOR PATENTS
PO Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER FOR RESPONSE/AMENDMENT

Sir:

Transmitted herewith is/are the following in the above-identified application:

(X) Response/Amendment ( ) Petition to extend time to respond
( ) New fee as calculated below ( ) Supplemental Declaration
( ) No additional fee (Address envelope to "Box Non-Fee Amendments")
( ) Other: _____ (fee $_____)

CLAIMS AS AMENDED BY OTHER THAN A SMALL ENTITY						
(1) FOR	(2) CLAIMS REMAINING AFTER AMENDMENT	(3) NUMBER EXTRA	(4) HIGHEST NUMBER PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEES
TOTAL CLAIMS	21	MINUS	21	= 0	X $18	$ 0
INDEP. CLAIMS	5	MINUS	5	= 0	X $84	$ 0
[ ] FIRST PRESENTATION OF A MULTIPLE DEPENDENT CLAIM					+ $280	$ 0
EXTENSION FEE	1ST MONTH $110.00 [ ]	2ND MONTH $410.00 [ ]	3RD MONTH $930.00 [ ]	4TH MONTH $1450.00 [ ]		$ 0
					OTHER FEES	$
					TOTAL ADDITIONAL FEE FOR THIS AMENDMENT	$ 0

Charge $ 0 to Deposit Account 50-1078. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 50-1078 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 50-1078 under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. A duplicate copy of this sheet is enclosed.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: **5/18/2005**

Typed Name: **Sherre Anne Treat**

Signature: Sherre Anne Treat

Respectfully submitted,

Jonathan Simon et al.

By _____ 5-18-05

Michael H. Jester

Attorney/Agent for Applicant(s)
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Date: **5/18/2005**

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Rev 05/03 (TransAmd)

- Attach as First Page to Transmitted Papers -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	)		
	)		
Jonathan Simon et al.	)	Conf. No.:	8835
	)		
Serial No.: 10/635,810	)	Group Art Unit:	2883
	)		
Filed: August 5, 2003	)	Examiner:	Derek L. Dupuis
	)		
For: ***Low Cost Optical Interconnect for Fiber Optic System***	)		

REQUEST FOR RECONSIDERATION UNDER 37 CFR §1.111

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

The allowance of Claims 22 and 23 in the second Office Action dated February 22, 2005, is noted. Reconsideration of the patentability of the remaining pending claims is requested based on the following remarks.

In the second Office Action, Claims 1-3, 6-8, 10-13 and 16-18 were rejected for alleged obviousness over Wang et al. in view of Kragl. The examiner contends that filling material 38 inside the notch in plastic fiber 32 "constitutes the penetrator." The examiner further contends that this penetrator is optically coupled to an optoelectronic device in the form of pickup 62. Applicants respectfully disagree. Filling material 38 is not a penetrator because it fills, and is therefore deposited in viscous or liquid form, in an already formed notch in the plastic fiber 32. The examiner contends that Kragl teaches that VCSELs are "obvious design choices over LEDs," citing Fig. 8 and column 15, lines 10-35 of Kragl. That patent discloses a device for optically coupling an optical waveguide to an electro-optical element. As best seen in Fig. 1A of Kragl, a rectangular submount 1 supports an LED 2 on top thereof. A plastic coupling element 3 surrounds the submount 1 and forms a socket for the optical waveguide 7. Fig. 8, and column 15, lines 10-35 of Kragl are nothing more than a graph comparing the irradiation angle of a VCSEL, an RCLED and a GaN-LED.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references when combined must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ.2d 1438 (Fed. Cir. 1991).

There is nothing in Kragl which would suggest that the optical pickups 62 of Wang et al. should be changed to VCSELs. In fact, this would make the device of Wang et al. inoperable for its intended purpose since a VCSEL emits radiation, whereas a pickup is intended to receive radiation and convert it into an electrical signal. Moreover, even if the examiner's proposed modification of Wang et al. were somehow accomplished, the result would still not be the invention of independent Claims 1 and 11 since the modified Wang et al. device would not have a penetrator or a plurality of penetrators configured for insertion along the length of a plastic optical fiber. Filling material 38 of Wang et al. deposited into preformed notches in optical fiber 32 does not satisfy the definition of a "penetrator." For the foregoing reasons, withdrawal of the obviousness rejection of independent Claims 1 and 11, along with the claims which depend therefrom, is requested.

In the second Office Action, Claims 1 and 8-10 were also rejected for alleged obviousness over Embrey (GB 2,168, 165 A) in view of Kragl. The examiner apparently contends that it would be obvious to substitute the VCSELs of Kragl into the device of Embrey. There is nothing in the cited portions of Kragl which would suggest the examiner's proposed modification of Embrey. The cited portions of Kragl are vague and general references comparing the angular irradiation patterns of a VCSEL to two different types of LEDs. There is nothing to suggest that a VCSEL would have any particular improved performance or benefit in the device of Embrey. The motivation to combine the teachings of prior art references requires desirability of making the proposed combination, not merely a trade off. A trade off concerns what is feasible, not what is necessarily desirable. Motivation to combine requires the

latter. *Winner International Royalty Corp. v. Wang,* 202 F. 3d, 1340 (Fed. Cir. 2000). For the foregoing reasons, withdrawal of the obviousness rejection of independent Claim 1, and Claims 8-10 which depend therefrom, over Embrey in view of Kragl is requested.

This application is in condition for allowance and notification to this effect is solicited. No additional fee is due at this time.

Respectfully submitted,

5-18-05

By: Michael H. Jester
Attorney for Applicants
Registration No. 28,022